

# INTERNATIONAL SEARCH REPORT

International Application No  
**PC/EP2004/005337**

**A. CLASSIFICATION OF SUBJECT MATTER**  
**IPC 7 F04B49/06**

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
**IPC 7 F04B**

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

**EPO-Internal**

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	DE 198 23 156 A (LANG APPARATEBAU GMBH) 2 December 1999 (1999-12-02) cited in the application column 3, line 5 - line 11	1
A	US 6 121 739 A (HABERLANDER ALBERT) 19 September 2000 (2000-09-19) column 1, line 45 - column 2, line 15	1
A	EP 0 294 858 A (MASSIMO SANNA TECNOLAB SNC) 14 December 1988 (1988-12-14) abstract	1
A	US 5 664 937 A (TAKAHASHI KENICHIRO ET AL) 9 September 1997 (1997-09-09) abstract	1
-/--		

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

**\* Special categories of cited documents :**

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*G\* document member of the same patent family

Date of the actual completion of the international search

**27 September 2004**

Date of mailing of the international search report

**04/10/2004**

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
 NL - 2280 HV Rijswijk  
 Tel (+31-70) 340-2040, Tx. 31 651 epo nl,  
 Fax (+31-70) 340-3016

Authorized officer

**Fistas, N**

# INTERNATIONAL SEARCH REPORT

International Application No

PC/EP2004/005337

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>GAWOL M: "DREHZAHLREGELUNG VON PUMPEN UND LUFTERN MIT FREQUENZUMRICHTER"            IKZ HAUSTECHNIK SANITAR, HEIZUNG KLIMA ELEKTRO, STOBEL VERLAG. ARNSBERG, DE,            vol. 49, 1994, pages 26-30,32, XP000195258            the whole document</p> <p>-----</p>	1-7

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/005337

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
DE 19823156	A	02-12-1999	DE 19823156 A1	02-12-1999
			AT 213523 T	15-03-2002
			DE 59900880 D1	28-03-2002
			WO 9961795 A1	02-12-1999
			EP 1082543 A1	14-03-2001
			US 6457944 B1	01-10-2002
US 6121739	A	19-09-2000	DE 19654084 C1	23-04-1998
			AT 213810 T	15-03-2002
			CA 2275756 A1	02-07-1998
			DE 59706526 D1	04-04-2002
			DK 956446 T3	10-06-2002
			WO 9828539 A1	02-07-1998
			EP 0956446 A1	17-11-1999
			ES 2173515 T3	16-10-2002
			NO 993094 A	22-06-1999
			PT 956446 T	31-07-2002
EP 0294858	A	14-12-1988	IT 1202723 B	09-02-1989
			EP 0294858 A2	14-12-1988
			US 4994984 A	19-02-1991
US 5664937	A	09-09-1997	JP 3111790 B2	27-11-2000
			JP 7218489 A	18-08-1995
			DE 19503360 A1	10-08-1995